United States Department of Agriculture
Forest Service

# Otter Project

## Decision Notice and Finding of No Significant Impact

**Marienville Ranger District, Allegheny National Forest, Elk County, Pennsylvania**

**January 2020**

*Coarse woody debris and glossy buckthorn in the Otter project area, photo taken by Scott Ion, Archaeological Technician*

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## Introduction

This decision notice describes my rationale for selecting vegetation management activities in the Otter project area. The Otter project would implement the Allegheny National Forest Land and Resource Management Plan (also referred to as the Forest Plan) and includes proposed management activities that are designed to contribute to achieving the desired condition outlined in that plan. This decision notice incorporates by reference the Otter Environmental Assessment.

### *Project Area*

The Otter project area includes National Forest System lands in Warrants 1568, 1778, 1783, 1830, 1858, 1863, 2038, 3232, 3251, 3252, 3254, 3265, 3278, 3283, 3284, 3656, 4537, 4846, 4847, 4848, 4849, 4856, and 4857, Highland, Jones, and Ridgway Townships, Elk County Pennsylvania. The project area lies northwest of Ridgway, Pennsylvania and encompasses approximately 14,506 acres. The project area includes approximately 5,130 acres within Management Area 2.2–Late Structural Linkages, 6,922 acres within Management Area 3.0–Even-aged Management, and 2,455 acres of private lands.

### *Purpose and Need*

The purpose of this project is to help achieve the desired condition described in the Forest Plan (USDA-FS 2007a) for Management Areas 2.2 and 3.0 by responding to Forest Plan, Management Area 2.2 and 3.0 goals and objectives.

### *Increasing early structural habitat*

The Forest Plan identified desired vegetation structural distribution for the Allegheny National Forest for the year 2020. As shown in the Allegheny National Forest's 2008–2013 monitoring report, there is a vegetation structural imbalance across the Forest (USDA-FS 2014, page 120). While mid and late structural stages are well-represented and meeting desired conditions, stands in early structural stages are falling far short of desired conditions. Only 3.8 percent of the Forest exists as early structural forest in 2015. This amount is less than half of the desired 2020 condition (USDA-FS 2007a, page 19, Errata). Currently, approximately 1 percent of the project area is in the zero to 20 age class (early structural habitat). An additional 1.5 percent of the project area was approved in previous decisions for regeneration harvests but have not been harvested yet.

The Forest Plan's early structural vegetation objective will be met or exceeded across the forest once all our proposed and recently approved projects are implemented. However, full implementation will take time due to a reliance on natural seedling establishment for regeneration. Since most of the forest does not already contain adequate advanced tree regeneration, we rely on a sequence of treatments to create growing conditions conducive for seedling establishment. Final harvest treatments can only occur once adequate tree regeneration is established. As a result, there can sometimes be a five, ten, or even twenty year lag between signing a project decision and completing all final harvests. As stands on the Allegheny National Forest continue to age and early structural vegetation develops into mid-structural vegetation, it is important to continue creating early structural vegetation in order to sustain this component over time. This proposal would create an additional 1,449 acres (12 percent of the project area) of early structural habitat and would help maintain the overall age class distribution described in the Forest Plan desired condition.

### *Creating suitable conditions for the establishment and development of desired tree seedlings*

Several challenges exist for establishing desired tree seedlings on the Allegheny National Forest. These include dense shade cast by overstory, midstory, and interfering understory vegetation, preferential browsing by deer, periodic seed crops, and variable seed viability, and in some cases, the decline of potential seed trees. Desired tree seedlings do not develop in sufficient quantities on the Allegheny National Forest without intensive forest management. Interfering understory vegetation frequently outcompetes tree seedlings as a result of decades of selective deer browsing (Horsley, Stout, and deCalesta 2003). Management actions create suitable conditions for the establishment and development of desired tree seedlings, in order to maintain important ecological structure, function, and processes.

### *Addressing the decline of American beech, black cherry, white ash, and eastern hemlock*

This project is needed to address present and future decline of American beech, black cherry, white ash, and eastern hemlock, due to non-native and native insects and diseases and other factors discussed below. If no action is taken, forest stocking levels may be reduced and could potentially result in areas with few seed trees, with forest understories dominated by interfering vegetation, including thickets of beech, striped maple, ferns, and glossy buckthorn. In some areas, few to no seed trees would remain. Stands with reduced stocking due to insects and diseases are more vulnerable to damage from windthrow, storms, and other general injury to tree crowns.

Vegetation management can improve forest health through a variety of overstory and understory treatments. Declining, mature, or poorly stocked stands can be regenerated to vigorous well-stocked young forest stands through a combination of timber harvest and reforestation treatments. Managing and regenerating declining stands now would promote natural regeneration of a diversity of desired trees. It would sustain healthy, well-stocked forested stands over the long-term. This project is designed to address forest health concerns by regenerating stands before natural regeneration opportunities are further reduced. Deferring management of these stands would likely increase the difficulty of successfully restocking them with diverse tree seedlings that would result in a more resilient future forest.

### *Providing a diversity of vegetation structural stages, age classes, and forest types*

Forest Plan desired conditions include providing a diversity of vegetative structural stages, age classes, and forest types across the landscape within the context of multiple use management. The purpose of this project is to sustain a desirable mix of tree species to ensure a healthy, diverse, and resilient forest. The dominant forest types on the Allegheny National Forest are upland and Allegheny hardwoods, primarily consisting of black cherry, red maple, black birch, and tulip poplar. American beech, eastern hemlock, yellow birch, and cucumbertree are common associates.

The uniformity of second growth forest across the Allegheny National Forest increases vulnerability to damage from repeated natural stresses and exotic insects and diseases. Beech bark disease[1] is an introduced insect-fungus complex which has resulted in substantial American beech mortality across the forest and in the project area. The fungus complex, introduced from Europe, results in the death of mature American beech trees. Once mortality of mature beech

[1] For information on beech bark disease visit http://na.fs.fed.us/fhp/bbd/

trees occurs, a dense thicket of beech suckers, or beech brush, is produced. As these suckers are genetically identical to the mature beech that died from the disease complex, they are also susceptible to the disease and will succumb to the disease complex in the next couple of decades. The dense regeneration of beech within the understory of infested stands prevents the establishment of other tree seedlings and creates a virtual monoculture that lacks the benefits of natural forest biodiversity (Forrester and others. 2003; Hane 2003; Latty and others 2003).

In addition to beech mortality, the health and abundance of white ash and hemlock is a growing concern on the forest. Emerald ash borer[2] is responsible for the rapid mortality of millions of ash trees across their range in the eastern United States and was detected on the Allegheny National Forest in 2013. The project area contains very few ash trees and most of these trees were infested with emerald ash borer and have perished. Hemlock woolly adelgid[3] was also confirmed on the Forest in 2013. It is much slower spreading than emerald ash borer but is expected to similarly result in high mortality levels to eastern hemlock beginning in the coming decade.

Black cherry crown health has been declining in many areas on the Allegheny National Forest. The reasons for this decline are not entirely clear, but it is thought that decline is linked to several interacting factors including insect defoliations, other canopy disturbances such as wind events and loss of American beech trees to beech bark disease, changing soil nutrient status, and potentially changing climate and weather patterns. Recent monitoring conducted on the Allegheny National Forest identified increases in black cherry decline and observed mortality on the Allegheny National Forest and on the Allegheny Plateau (Long and others, personal communication 2015 unpublished; PA Bureau of Forestry 2015 unpublished). Specifically, the proportion of stand dead black cherry stems on 97 intensive forest health monitoring plots containing black cherry on the Allegheny National Forest has increased from less than 10 percent in the 1998–2001 measurement cycle to more than 22 percent in the 2014–2015 measurement cycle. Similarly, continuous forest inventory data collected on the Pennsylvania High Plateau (Allegheny National Forest region) noted an increase from around 3 percent dead black cherry stems in the 1997–2000 measurement cycle to more than 30 percent in the 2009–2013 measurement cycle.

Cherry scallop shell moth is a defoliator of black cherry, and occasionally other native cherries. The moth is a native insect to Pennsylvania and the eastern United States. The moth larvae fasten margins of leaves together and form an elongated nest, within which they feed on the upper tissues of the leaves. Once feeding is complete, the larvae will move on to construct more feeding nests. Damage to black cherry trees range from a loss of radial growth, partial crown mortality to total tree mortality, depending upon the severity (percentage of the crown) of the defoliation and the duration (how many years) of defoliation. Currently the Allegheny National Forest is in the fifth year of a cherry scallop shell moth outbreak and each year the outbreak area has increased in size. The Forest Service is monitoring cherry scallop shell moth defoliation and associated effects on overall black cherry crown health.

Non-native invasive glossy buckthorn (***Frangula alnus***) has grown from known small populations in 1990s to infestations over tens of thousands of acres in 2018. The expanding population that may impact hundreds of thousands of acres in the foreseeable future if left unchecked. These thickets can impede hunters, hikers, and wildlife moving through the forest, as well as exclude other shrubs, trees, and native herbaceous plants from establishing or remaining

[2] For information on emerald ash borer visit http://na.fs.fed.us/fhp/eab/

[3] For information on hemlock woolly adelgid visit http://www.na.fs.fed.us/fhp/hwa/

on site. Wherever they dominate the shrub layer, they can grow so thickly that they prevent the establishment of native species and reduce any opportunity for plant diversity. Dense thickets of buckthorn also increase shade (which reduces tree seedling growth and survival) and increase competition for water and nutrients. In all cases, the presence of the prolific buckthorn retards natural patterns of genetic variation in native species. It also threatens to impede the range of silvicultural and reforestation practices available to the Allegheny National Forest to promote a diversity of tree seedling of good quality, form, and health and maintain high quality hardwood sawtimber. Interference from non-native invasive plants is a threat to forest health and native plant communities. Monitoring and controlling the spread of invasive plant species is an important component of providing a healthy, sustainable forest ecosystem.

### *Potential old growth*

As per the Forest Plan standard (page 115) for Management Area 3.0, a set of currently identified and mapped potential old growth areas is maintained for Management Area 3.0–Even-aged Management and these areas may be revaluated and adjusted during project planning. There are seven stands in Management Area 3.0 within the Otter project area that were previously designated as potential old growth. Three of these stands 871049, 871073, and 885024 are being proposed for regeneration harvests due to forest health concerns.

For all of three stands, glossy buckthorn is in the understory of adjacent or nearby stands and presents an additional impediment to stand diversity and health when the beech brush succumbs to beech bark disease. And for all three stands, the need for salvage and regeneration treatments would make it unlikely that they would retain any potential for old growth characteristics.

### *Enhancing wildlife habitat*

Inventory data and field surveys indicate a variety of habitat conditions in differing amounts occur throughout the project area. Multiple vegetative age classes occur providing cover and structure for a variety of wildlife species. Predominately maturing forest over-story trees exist, but varied vegetative conditions occur in the forest understory. Small tree and shrub conditions occur in the understory but are also present in riparian areas and herbaceous openings throughout the project area. These shrubs include mainly witch hazel, Juneberry, and muscle-wood. Vegetative wetlands and riparian areas contain varied amounts of those species as well as species associated with wetland conditions. Conifer cover is mainly in the form of hemlock and occupies the riparian areas as well as drier hilltop site conditions. Plantations of red pine, tamarack, and occasional white pine exist in some locations. Herbaceous openings, both constructed from historic management and those occurring in wetland and riparian environments exist. Snags, den trees, and coarse wood occur in some of the area providing structure and den sites for wildlife species. Non-native invasive plant species, mainly glossy buckthorn are widespread and influence the area's condition. There is a need to enhance or create wildlife habitat for a variety of wildlife species where the conditions exist or are absent.

### *Reducing interference from non-native invasive plant species*

The project area is undergoing a variety of changing habitat conditions. Field surveys indicate that forest health, which includes all vegetation, is being affected by a variety of non-native invasive insects, disease, and mortality, natural disturbances such as wind and storm events, and selective deer browsing in some species and some places. Non-native invasive plants are quickly adapting to changing conditions and establishing themselves in areas where native vegetation had predominately existed. Both climatic and seasonal changes will occur in both the short term and long term that will also affect wildlife habitat. Although the project area contains a variety of non-native invasive plants, glossy buckthorn is the primary threat to wildlife habitat. Because of

its adaptability and proliferation abilities in a variety of growing conditions, it is present in all forms of habitat and dominates site conditions, crowding out and influencing native vegetation. There is a need to reduce non-native plant species to ensure native plant diversity and health.

### *Improving stream conditions*

Stream habitat monitoring found that many streams in the project area lack habitat diversity that would contribute to improved habitat for aquatic animals and enhanced recreational experiences for anglers. Pools and slow water habitat are present, but lack cover and pools are generally shallow. Also, large wood monitoring on several streams shows streams lack sufficient large wood to create quality pools, slow flood flows, or store sediment and organic debris. Many streams are also lacking adequate vegetation to provide shading and to provide an adequate supply of large wood in the future.

### *Improving soil and water quality*

Waterways in the Big Mill Creek and Bear Creek watersheds are susceptible to acid precipitation due to their location, shallow soils and parent geology with low buffering capacity (USDA-FS-2007b, page 3-27). There are 5.9 miles of streams in Otter project area that fail to meet Commonwealth water quality standards and are listed as impaired. These streams' listings note "do not attain protected water uses" due to low pH from "Atmospheric Deposition". The waters include Bloody Run and Rocky Run within the Big Mill Creek and Bear Creek Watersheds. As acid precipitation contacts with watershed soils it releases and mobilizes dissolved aluminum from the soil. The transport of dissolved phases of aluminum from watershed soils and through stream systems is toxic to fish and other aquatic life at low concentrations. There is a need to apply lime throughout Big Mill Creek and Bear Creek watersheds where it would be beneficial to soil and water resources, and in the long-term benefiting the aquatic resources. The lime would help neutralize the acidity with in soil pore water and increase pH and alkalinity of soil stormwater runoff, surficial groundwater, and waterways.

There are numerous dispersed camping sites within the project area. Many of these sites are in riparian areas. Soils and vegetation in riparian areas are very sensitive and loss of vegetation and compaction of the soil can occur rapidly. There is a need to close some dispersed campsites and improving others to mitigate the impacts to soils and water quality and to create a more sustainable dispersed camping experience.

Illegal ATV use occurs in several places across the project area, usually on powerlines and other utility corridors. Illegal riding causes soil compaction, soil erosion, and loss of vegetation. There is a need to block illegal ATV access points within the project area to reduce or eliminate impacts to soils and water quality.

## Decision

After reviewing the environmental analysis, supporting documents and public response, my decision is to implement the proposed action alternative as described on pages 5–9 of the environmental assessment, as well as maps 1–7 and Appendix B of the environmental assessment, with no modifications or changes. Please note that multiple treatments and activities would occur on the same area (designated as "Stand" in Table B-1 in Appendix B).

My decision and findings are based on my expertise and knowledge of the area, as well as that of the interdisciplinary team that developed and analyzed the project, the Otter Environmental Assessment, including the project biological assessment and project biological evaluation, the Otter project record, and the Forest Plan.

My decision includes timber harvest on 1,587 acres using even-aged management and uneven-aged management. The proposed timber harvest practices are described in the Otter scoping documents and in the Forest Plan (USDA-FS 2007a, Appendix A, pages A-18 to A-29). Uneven-aged management would be applied on 138 acres, and even-aged management would be applied on 1,449 acres. Within the total area proposed for timber harvest, reforestation activities would be applied on 1,585 acres. The number of acres prescribed for specific reforestation activities are provided in Table 1 of the environmental assessment and by stand in Table B-1 of Appendix B.

Non-native invasive plant treatments would be applied on up to 67 acres through a combination of manual, mechanical, and chemical (herbicide) treatments. Herbicide treatment includes the use of formulations of glyphosate, sulfometuron methyl, or both according to Forest Plan standards and guidelines (USDA-FS 2007a, pages 54-59). A combination of treatments may occur several times during a growing season and over a period of several years. Additional non-native plant species treatments approved in the Marienville Buckthorn Treatment decision will also be implemented within the Otter project area.

A variety of activities would occur to restore, maintain, and enhance wildlife and aquatic habitat (see pages 4 and 5 and Table 1 of the environmental assessment [page 7]). Aquatic habitat treatments would include approximately 30.2 miles of large wood introductions and 24 acres of riparian planting. Proposed lime applications on 272 acres and recreation improvements would improve soil conditions and water quality.

Approximately 2.2 miles of road (1.2 miles using new corridors and 1.0 miles using existing corridors) would be constructed to provide access for management. Approximately 1.7 miles of road would be realigned to provide access for management. Approximately 35 miles of road would be maintained for hauling timber. High quality road surfacing would be applied to approximately 14.3 miles of road with 300 feet of streams. Approximately 11 miles of Forest Service system and non-system roads would be decommissioned. Road management changes would include approximately 4.6 miles of road (see Table 1 of the environmental assessment) and involve the installation of 8 new gates.

In some areas, the new regeneration harvests for the proposed action, when combined with past and other previously approved regeneration harvests, would create 14 temporary openings that may exceed 40 acres, ranging in size from 46 to 464 acres. As explained in the environmental assessment and noted above, I am concerned that viable seed trees are declining in these stands to the point that it will become very difficult over time to successfully regenerate the forest stands with a diversity of tree species. While the Allegheny National Forest strives to limit temporary openings to 40 acres or less, larger openings are needed to regenerate these areas before these opportunities are lost. Specifically, these larger openings will occur where stand data shows a rapidly declining overstory resulting in reduced opportunity for natural regeneration.

We need to take advantage of the reproductive capability of stands that currently have some remaining species diversity. Otherwise, we run the risk of losing these stands to non-native invasive species such as buckthorn, or short-lived species such as diseased American beech coppice growth or black birch. The native beech and birch have a place in a diverse stand, but they will choke out species diversity if they are the only seedlings to take hold.

I took a hard look at the need to create the proposed large temporary openings, and I have considered the thoughtful public comments that have challenged us to revisit and either validate or mitigate these openings. Some of these proposed openings would exceed 40 acres based on

treatments prescribed here, while others would exceed 40 acres only when considered in conjunction with treatments previously approved or already implemented in adjacent areas. In the case of the latter, the duration of the larger opening would diminish as the adjacent stands grow out of the sapling stage.

## Reasons for the decision

The purpose and need for the project include six components around which the proposed action was developed. All these components are interconnected by need to maintain habitat diversity and a resilient, healthy forest within the project area and on the Allegheny National Forest as a whole. The interaction of age classes, structural classes, and plant species contributes to maintenance of this habitat diversity and a resilient forest. Based on my review of the proposed action, the affected environment and guidance contained in the Forest Plan, I have made the following determinations:

- The proposed action contributes to achieving specific objectives for management areas as described in the Forest Plan;
- The proposed action is consistent with strategies described in the Forest Plan, which are relevant and specific to the affected resources and resource concerns;
- The proposed action is consistent with the rationale for choice of vegetation management practices (described in terms of appropriateness and optimality) as defined in Appendix A of the Forest Plan;
- The proposed action incorporates all relevant design criteria that are consistent with standards and guidelines from the Forest Plan, and;
- The proposed action is similar to other multiple-use management projects on the Marienville Ranger District, based on the size of the project area, size of individual treatment areas, scope of activities, duration of implementation, and prescribed methods.

Conclusions and recommendations in FY2008-FY2013 Monitoring Report (USDA-FS 2014) for Allegheny National Forest further support the decision for the project. Specifically:

- The 2007 Forest Plan projected that early structural habitat stages resulting from timber harvest would comprise 8–10 percent of the forested landscape (USDA-FS 2007a, pages 11 and 19). However, from 2007 to 2014, early structural habitat has declined from approximately 8 percent of the forested landscape to 3.4 percent (USDA-FS 2014, page 68).
- Even-aged and uneven-aged regeneration harvests have been lower than Forest Plan objectives. Because of this, landscape-level desired vegetative structural stages and age classes will not be sustained at levels sufficient to meet desired Forest Plan ecosystem conditions (USDA-FS 2014, page 121).
- A combination of manual/mechanical treatments and herbicide use has been effective in eliminating targeted species in treatment areas (USDA-FS 2014, page 173).

Recent raw monitoring data indicates that timber harvest since 2014 may have slightly increased the percentage of early structural habitat; but this project is necessary to maintain the current percentage or move it closer to the projected level.

I carefully considered limiting opening sizes to the smallest area that would create conditions for regeneration of desirable, diverse hardwood species to improve the overall health of declining stands. However, declining forest health and diminishing opportunities to regenerate affected stands make it necessary to apply the full range of tools provided by sound silvicultural science to assure successful reforestation of these stands. Larger temporary openings tend to disperse the impacts of deer browse, allow for more cost-efficient reforestation techniques, potentially reduce the use of other regeneration tools such as fencing and herbicide, and have proven effective in regenerating stands in similar conditions. As noted above, these openings would result from a combination of harvests accomplished in this decision with the temporary openings already established by the overstory removals approved in the original decision. Within 20 years of any harvest, the new woody vegetation will have grown enough to move stands into a mid-successional stage, dividing these large temporary openings into smaller and smaller units. Regeneration will be established in a stand before the overstory is removed, and in previously harvested adjacent units, the regeneration is already well on its way to growing into a new forested stand. My proposal to establish these large temporary openings was presented to and has been reviewed by the Regional Forester.

Scenic integrity may be temporarily impacted, but this will pale next to the longer-term trajectory of a forest cover diminished by mortality, non-native invasive plants, insects and disease. And the use of the herbicide glyphosate, when applied as defined by the risk assessment for the 2007 Forest Plan, has proven invaluable in regenerating woody species and effectively contending with non-native invasive plants.

It has been implied that we miss the true value of the forest because of a desire to harvest valuable trees. Such an argument fails to note that it is the mission of the Forest Service to "sustain the health, diversity and productivity of the Nation's forests … to meet the needs of current and future generations." The Allegheny National Forest is at a critical point where all the gains in species diversity over the past 30 years may be lost as one species after another is diminished by its own special non-native invader. But it is the very resilience that effective management of the past 30 years has established on the Allegheny National Forest that affords us the opportunity now to regenerate healthy young forests with a greater chance of resisting the ravages of non-native invasive species.

Considering all these factors, I am confident that the proposed action is well-grounded in the Forest Plan as a guiding document, current and consistent with recommendations from the FY2008-FY2013 Monitoring Report, and all elements of the proposed action are responsive to the purpose and need for action.

### *Environmental Consequences*

I have carefully reviewed the analysis framework and environmental consequences for each affected resource, and I considered the potential effects in the context of the indicator measures that were composed by the interdisciplinary team for the effects analyses (Environmental Assessment, page 13, Table 6). Because the proposed action is similar to other multiple-use management projects on the Marienville Ranger District, I am confident that resource specialists on the interdisciplinary team are familiar with potential effects. No evidence was revealed in any of the comments submitted during the designated 30-day comment period for the environmental analysis, nor is any evidence in the project record that indicates any substantial uncertainty or unknown risks regarding effects of the proposed action. The effects of the various elements of the proposed action have been studied (from past projects) for over two decades. Monitoring information concerning effects and mitigation efficacy was a key part of the analysis for this

proposal. The interdisciplinary team considered the best available scientific information as well as opposing viewpoints to complete all components of the environmental analysis and support a finding of no significant impact.

## Other Alternatives Considered

No other action alternatives were proposed by the interdisciplinary team or the responsible official based on potential resource conflicts, and none were generated by unresolved resource conflicts revealed after thorough review of public scoping comments. Four other alternatives were requested by respondents during the scoping period. These four alternatives were considered, but not fully analyzed. The rationales for why these alternatives were not considered in detail are disclosed on pages 10 and 11 of the environmental assessment. Because of this, only the proposed action and no action alternatives were fully analyzed. I have determined this range of alternatives is adequate and follows Forest Service environmental analysis regulations at 36 CFR 220.7 for consideration of alternatives.

### *No Action Alternative*

The no action provides a baseline for comparison of potential effects from the proposed action. In the no action, the activities described in the proposed action would not take place. Previously approved vegetation management activities would occur, as described in the environmental assessment (Table 3, page 10). Existing road uses and recreational activities would also continue. The no action alternative was not selected because it would not meet the purpose and need for the project.

## Tribal Consultation

The Forest Service has consulted with the Pennsylvania Historical and Museum Commission, the State Historic Preservation Office, and the following tribes: Absentee-Shawnee Tribe of Oklahoma, Cayuga Nation, Delaware Nation, Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Oneida Indian Nation, Oneida Nation of Wisconsin, Onondaga Nation, Seneca Nation of Indians, Seneca-Cayuga Tribe of Oklahoma, St. Regis Mohawk Tribe, Shawnee Tribe, Stockbridge-Munsee Band of Mohican Indians, Tonawanda Band of Seneca, and Tuscarora Nation, in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. All proposed management activities in this project were reviewed by these agencies for potential effects to cultural resources and no concerns were identified. Concurrence from the Pennsylvania State Historic Preservation Office was received on December 12, 2019.

## Public Involvement

The Otter project was first listed in the Allegheny National Forest Schedule of Proposed Actions in the January 2019 issue. On December 21, 2018, a scoping package was mailed to interested individuals and organizations, including adjacent landowners and subsurface mineral owners, and posted on the Allegheny National Forest website on December 21, 2018. A news release was sent to local media on December 18, 2019. The public scoping period for the project ended on January 22, 2019. Comments were received from three respondents. These comments were analyzed by the interdisciplinary team, and the comments and responses are included in the environmental assessment (Appendix A–Scoping Comments Summary).

The scoping comments identified site specific concerns with impacts to unroaded areas, as well as opportunities to expand unroaded areas. Additional comments expressed concerns with temporary openings in excess of 40 acres and inaccuracies with how these openings were identified and displayed in the scoping document. Corrections were made to address the

inaccuracies; and the concerns and opportunities were addressed within the context of either of the No Action and Proposed Action alternatives. Additional comments regarding the use of herbicides did not provide any new site-specific information, either in the form of focused, applicable peer-reviewed studies conducted at the local or regional level, or in the form of site or resource conditions not previously identified by the interdisciplinary team. As a result, no alternatives to the proposed action were formulated to address the purpose and need for the project or advanced for full analysis in the environmental assessment presented for 30-day comment.

The environmental assessment was made available to the public for review during a designated 30-day comment period, which began on June 26, 2019 when a legal notice was published in *The Kane Republican* (newspaper of record). Four individuals submitted comments during the 30-day comment period on the environmental assessment. Comments were analyzed by the interdisciplinary team, and the comments and responses are included in this document starting on page 17.

I have reviewed comments received as a result of public scoping, those received during the 30-day comment period for the environmental assessment, and the responses to these comments composed by resource specialists on the interdisciplinary team. I truly appreciate the time and effort taken by members of the public to share their thoughts and concerns regarding this action. This input challenges us to more closely examine our proposal, consider it in a different context, identify viable alternatives to meeting the purpose and need for action, and adjust our proposal or focus our analysis in ways that may better meet the expectations of the public, incorporate new information or improve the long term management of the Allegheny National Forest. While I have carefully considered those comments in arriving at my decision, I recognize that my decision may not satisfy all concerns expressed in the comments.

Some comments reflect disagreement with the goals, objectives and management direction contained in the Forest Plan. Because the purpose and need for the project is to achieve certain resource goals identified in the Forest Plan, these comments are beyond the scope of the project.

Consistent with the record of decision for the Forest Plan (USDA-FS 2007a, page ROD-15), I believe that the proposed action balances sustainable resource use and ecological sustainability in a manner intended to satisfy competing public demands.

## Findings required by other laws and regulations

My decision implements vegetation management activities and connected actions intended to develop desired conditions in the Forest Plan. As required by the National Forest Management Act section 1604(i), I find this project to be consistent with the 2007 Allegheny National Forest Land and Resource Management Plan. This decision is also in full compliance with the laws and regulations cited below, with reference to relevant page numbers in the environmental assessment.

Archaeological Resources Protection Act – Environmental assessment, page 45.

Clean Air Act – Environmental assessment, pages 41–45.

Clean Water Act – Environmental assessment, pages 30–40.

Endangered Species Act – Project biological assessment and summarized in environmental assessment on page 20.

Environmental Justice (Executive Order 12898) – Public involvement did not identify any adversely impacted local minority or low-income populations. My decision is not expected to adversely impact minority or low-income populations.

Federal Cave Resources Protection Act – No known cave resources would be affected by my decision.

Floodplains (Executive Order 11988) – Environmental assessment, pages 30–40.

National Environmental Policy Act – This act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with the National Environmental Policy Act.

National Historic Preservation Act – Environmental assessment, page 45.

Native American Graves Protection and Repatriation Act – No Native American grave sites are known nor were any identified as a result of public scoping or consultation with tribal representatives.

Regional Forester Sensitive Species (Forest Service Manual 2670) – project biological evaluation and summarized in the environmental assessment on pages 21–22.

Wetlands (Executive Order 11990) – Environmental assessment, pages 30–40.

Wild and Scenic Rivers Act – The project area does not include or affect any designated Wild and Scenic River.

## Administrative Review and Objections Process

This decision was subject to an objection review process pursuant to 36 CFR 218, subparts A and B. These regulations are available at: http://www.gpo.gov/fdsys/pkg/FR-2013-03-27/pdf/2013-06857.pdf. One objection was received. The Reviewing Officer, Jamie Davidson, found that each point raised in the objection was adequately addressed in the Otter Environmental Assessment, this associated decision, and the project file documents.

## Final Decision

This decision may be implemented any time after the decision is signed.

For additional information concerning this decision, please refer to the Allegheny National Forest web site for the project at https://www.fs.usda.gov/project/?project=55025. You may also contact Kevin Treese, Planning Team Leader, at the Marienville Ranger Station, 131 Smokey Lane, Marienville, PA 16239 or by phone (814) 927-5759.

I, District Ranger Robert T. Fallon, am the responsible official for this decision.

ROBERT T. FALLON
Marienville District Ranger

January 21, 2020
Date

## Finding of No Significant Impact

As the responsible official, I am responsible for evaluating the effects of the project relative to the definition of significance established by the CEQ Regulations (40 CFR 1508.13). I have reviewed and considered the environmental assessment and documentation included in the project record, and I have determined that the proposed action will not have a significant effect on the quality of the human environment. As a result, no environmental impact statement will be prepared. My rationale for this finding is as follows, organized by sub-section of the CEQ definition of significance cited above.

### *Context*

For the proposed action and the no action alternatives, the context of the environmental effects is based on the environmental analysis in this environmental assessment. The Otter project was proposed to achieve long-term desired conditions identified in Allegheny National Forest Record of Decision for the Final Environmental Impact Statement and the Forest Plan. The proposed action would achieve Forest Plan goals and meet specific objectives for early structural habitat, structural and age class diversity, non-native invasive plant reduction and control, and wildlife habitat diversity. All applicable Forest Plan standards and guidelines were applied to project design.

The project area includes approximately 2.3 percent of National Forest System lands within the Allegheny National Forest. The total area proposed for timber harvest comprises about 13.2 percent of National Forest System lands within the project area and approximately 0.003 percent of all National Forest System lands within the Allegheny National Forest. Combined with reforestation, wildlife habitat enhancement, nonnative invasive plant treatment activities and timber management activities approved in previous NEPA decisions, approximately 24.8 percent of National Forest System lands land within the project area would be treated in some manner over 20 years.

### *Intensity*

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this environmental assessment and the references in the project file. I have determined that the interdisciplinary team considered the effects of this project appropriately and thoroughly with an analysis that is responsive to concerns and issues raised by the public. They took a hard look at the environmental effects (both beneficial and adverse) using relevant scientific information and their knowledge of site-specific conditions gained from field visits. Benefits of this project were not used to offset adverse impacts, and adverse impacts of this project are not significant even when separated from benefits (Environmental Assessment, pages 16–56). My finding of no significant impact is based on the intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

1. ***Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.***

The interdisciplinary team analyzed effects of the proposed action and no action by addressing 11 indicator measures within the context of eight resource categories. Potential effects for each indicator measure were determined independent of one another and in concert with one another where clear interactions between resources could be identified. The analyses documented in the Environmental Consequences of the Proposed Action and Alternatives section of the environmental assessment (pages 11–56) state that some direct and indirect effects are expected in the context of the analysis area. The interdisciplinary team has applied project design features

to the proposed action to ensure that even direct and indirect effects to these resources will not be significant. None of the direct and indirect effects are expected to result in any significant cumulative effect to any resource or indicator measure.

The environmental assessment, appendices, and project file also includes detailed analyses of the effects of the alternatives to vegetation and forest health; wildlife and sensitive plants; non-native invasive plants; soils and hydrology; air quality; heritage resources; recreation opportunities, forest settings and unique areas; and human health and safety. These analyses contribute to my understanding of the effects of the alternatives and confirm that there will be no significant effects to those resources.

***2. The degree to which the proposed action affects public health or safety.***

Implementation of the proposed action will not result in any significant increased risks to public health and safety. The environmental assessment (pages 54–56) considered risks to public health or safety as one of 11 indicator measures for environmental analysis. Analysis of this indicator measure focused on herbicide use, smoke emissions from prescribed fire, and vehicle traffic associated with vegetation management activities. The proposed action would avoid adverse impacts to public health and safety through implementation of Forest Plan standards and guidelines, Pennsylvania best management practices, project design features, timber sale contract requirements, Office of Safety and Health Administration requirements, and standard operating safety procedures.

***3. Unique characteristics of the geographic area such as the proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.***

The interdisciplinary team considered potential effects to unique characteristics of the landscape in the environmental analysis:

- Prime farmland and farmland of statewide importance would increase by a net of 11.1 acres due to proposed road decommissioning (Environmental Assessment, page 27).
- Approximately 326 acres of wetlands designated as part of the National Wetland Inventory are within the project area (Environmental Assessment, Table 5, page 12). Forest Plan standards and guidelines will be applied to buffer these and other small forested wetland areas (not included in the National Wetland Inventory) from project activities so that these areas will not be affected by project activities.
- The closest wild and scenic river is the Clarion Wild and Scenic River, which is approximately 2.8 miles south of the project area (Environmental Assessment, page16). The closest designated wilderness area is approximately 23.3 miles to the northwest (Otter Environmental Assessment, page 12) of the project area, and the closest wilderness study area is approximately 18.3 miles to the north (Environmental Assessment, page 12) of the project area.
- No parklands or other ecologically critical areas are within or adjacent to the project area.
- See intensity factor number 8 for historical or cultural resources.

4. ***The degree to which the effects on the quality of the human environment are likely to be highly controversial.***

The effects on the quality of the human environment are not likely to be highly controversial. Proposed treatments are based on well-established methods applied throughout the region on private and public forest lands. The rationale for choice of vegetation management practices to be applied is well-described in the Forest Plan.

Comments submitted during the scoping period raised questions about potential scientific dispute regarding the use of the herbicide glyphosate (Environmental Assessment, Appendix A Scoping Comments Summary, pages A-6–A-9). The interdisciplinary team reviewed the literature cited in the comments and determined that no substantial scientific dispute was evident. Based on the regulatory definition, there is no substantial dispute among the scientific community as to the size, nature, or effects of implementing the proposed action on the biological, and physical and social environments.

5. ***The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.***

No evidence was revealed in any of the components of the environmental analysis, nor is any evidence in the project record that indicates any substantial uncertainty or unknown risks regarding effects of the proposed action. The effects of the various elements of the proposed action have been studied (from past projects) for at least a decade. Monitoring information concerning effects and mitigation efficacy was a key part of the analysis for this proposal. The interdisciplinary team considered the best available scientific information as well as opposing viewpoints.

The conclusions of these local resource experts are described in the environmental assessment effects discussions. Much is known regarding the outcomes when using even-aged management on the Allegheny National Forest. Outcomes from using uneven-aged management are less certain. Consequently, the Forest Plan (USDA-FS 2007a, pages ROD-26 and ROD-50) places an emphasis on monitoring these treatments and a flexible adaptive approach to vegetation management (USDA-FS 2007a, page ROD-22). Any future decisions will need to consider all relevant scientific and site-specific information available at that time.

6. ***The degree to which the action may establish precedent for future actions with significant effects or represents a decision in principle about a future consideration.***

The proposed action does not establish a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration. The size of the project area, size of individual treatment areas, scope of activities, duration of implementation, and prescribed methods are typical of other multiple-use management projects on the Marienville Ranger District. All management activities are consistent with Forest Plan direction for affected management areas and resources and are intended to directly address and achieve Forest Plan objectives.

7. ***Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.***

No cumulatively significant impact on the environment is anticipated based on environmental analysis. The proposed action is related to other actions with individually insignificant effects in the context of past, present and reasonably foreseeable actions on both National Forest System and private lands within the project area. Past and present actions are reflected in the description of the existing condition (Environmental Assessment, pages 11-12). Reasonably foreseeable actions are described as those approved in previous NEPA decisions (Environmental Assessment, page 9–10 and Table 3) that have not been implemented, as well as projected future oil and gas development of the private mineral estates. The interdisciplinary team considered the potential for the proposed action to contribute to potentially significant cumulative effects to each of the indicator measures based on an analysis area and time frame unique to each affected resource (Environmental Assessment, Table 7, pages 14–16). The environmental analysis found that the proposed action was not likely to contribute to any significant effect to any resource based on this relationship.

8. ***The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.***

The project area has been inventoried for heritage resources. The proposed action would not adversely affect any districts, sites, highways, structures, or objects currently listed, eligible for listing, or unevaluated for listing in the National Register of Historic Places. Heritage resources have been delineated and buffered for protection or avoided. There are no concerns regarding research sited within the Otter project area. All research studies within the project area are closed (project file). No effects to heritage or scientific resources are anticipated with implementation of the proposed action.

9. ***The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.***

There is no designated critical habitat for any federally threatened or endangered species on the Allegheny National Forest. Based on the project biological assessment (located in the project file), a "no effect" determination was reached for the small-whorled pogonia, northeastern bulrush, and the following mussel species: northern rifflesheIl, clubshell, rayed-bean, sheepnose, snuffbox, and rabbitsfoot. These project level activities and determinations are within the level of actions analyzed in the biological evaluation for the Forest Plan. A concurrence letter on the biological evaluation for the Forest Plan, dated January 31, 2007, was received from the U.S. Fish and Wildlife Service.

The northern long-eared bat was listed by the U.S. Fish and Wildlife Service as “threatened” under the Endangered Species Act on April 2, 2015 (USDI-FWS 2015). The project biological assessment has determined that project activities “may affect, likely to adversely affect” the northern long-eared bat and will not jeopardize the continued existence of the species. Project activates are consistent with the U.S. Fish and Wildlife Service programmatic biological opinion on implementing the final 4(d) rule as well as activities that do not require special exemption from taking prohibitions applicable to the northern long-eared bat (USDI-FWS 2016a). Therefore, any taking that may occur incidental to project activities is not prohibited under the final 4(d) rule (50 CFR § 17.40(o)) (USDI-FWS 2016b); and the U.S. Fish and Wildlife Service programmatic biological opinion satisfies the Forest Service’s responsibilities under the Endangered Species section 7(a)(2) relative to the northern long-eared bat for this project.

The primary factor cited in the proposed listing rule responsible for the decline of northern long-eared bat populations is white-nose syndrome. The U.S. Fish and Wildlife Service (2013) determined that although several activities, such as construction of physical barriers at cave accesses, mining, development, and timber harvest may modify or destroy northern long-eared bat habitat, these activities alone do not have significant, population-level effects on the species.

The impact of this project on individuals and habitat is not expected to adversely affect the conservation and recovery efforts for the species for several reasons, including but not limited to the following:

a. Forest management and silviculture are vital to the long-term survival and recovery of the northern long-eared bat and the U.S. Fish and Wildlife Service have determined that when the prohibitions for the species included in the final 4(d) rule are applied to forest management activities, the potential impacts will be significantly reduced (USDI-FWS 2016b).

b. Conducting timber harvest activities or tree removal outside the hibernation period could conceivably result in direct mortality or injury to northern long-eared bat by incidental felling of roost trees, particularly if non-volant bats are present. In areas of extensive intact forest, the likelihood that a given harvest will result in the loss of a maternity colony is small. Suitable habitat, as well as potential maternity roosts and day roosts, are abundant and widely distributed across the project area. Additionally, there are well over 18.9 million potential roost trees on the Allegheny National Forest (Miles 2015). The likelihood of direct mortality from prescribed fire is extremely low as the proposed burning would occur in early spring or fall. Timber harvest is an important tool that could improve forest structure by creating canopy gaps and snags, by reducing stand density and midstory clutter, and by increasing forest diversity to maintain suitable roosting and foraging habitat.

c. This project would provide protection for the northern long-eared bat during its most sensitive life stages. There are no known occupied maternity roosts in the project area, and there are no activities proposed within ¼ mile of known hibernacula. Should maternity roosts be in the vicinity of proposed activities in the future, conservation measures will be applied to avoid cutting or destroying them unless they are in immediate safety hazard.

d. Forest Plan standards and guidelines implemented for Indiana bat (USDA-FS 2007a, pages 81–82, USDI-USFWS 2007) will minimize potential harm or harassment to this species and retain key habitat components at the stand and landscape level.

***10. Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.***

The proposed action complies with federal, state, and local laws and requirements imposed for the protection of the environment. These include the Clean Water Act, Wetlands and Floodplains Executive Orders, the Endangered Species Act, The National Historic Preservation Act, the National Environmental Policy Act, and the National Forest Management Act. The proposed action complies with all Forest Plan desired conditions, objectives, standards, and guidelines.

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